



CINEMATIC STRUCTURE

The emergence of “je ne sais quoi”

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ABSTRACT

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Tämä opinnäytetyö pyrkii avaamaan näkemyksiäni elokuvaleikkaajana elokuvan rakenteesta (struktuuri). Rakenne ja kaavat yhdistetään usein formaatti -pohjaiseen käsikirjoitusmetodiin. Kuinka hyödyllisiä kaavat ovat, tai eivät ole, on kiistanalaista.

Vaikka kirjoittajan tai leikkaajan on työskenneltävä rakenteen elementtien kanssa, mikään taiteellista arvoa omaava teos ei voi syntyä yksinkertaisesti seuraamalla kaavaa. Taiteen keskeinen ominaisuus on rehellisyys itseään kohtaan.

Ensin pyrin erottamaan abstraktisen käsitteen 'elokuvallinen rakenne', tarinan omasta rakenteesta, sekä kirjallisuuden rakenteesta. Seuraavaksi kuvailen analysoiden, leikkausprosessia —raakaleikkauksesta viimeistelyyn—tarkentaen rakenteellisiin asioihin, unohtamatta kuitenkaan leikkaajan ja ohjaajan välistä vuorovaikutusta.

Koen rakenteen kallistuvan luontaisesti kohti matemaattista "kultaista leikkausta". Kultaisen leikkauksen ansioksi luetellaan usein esteettinen kauneus luonnossa, taiteessa ja fraktaali geometriassa. Tuo järjestäytynyt rakenne on kaaoksen seuraus ja ilmaisukeino.

Päätän tutkielmani ajatukseen, jossa leikkaukselliset huomiot rakenteesta ovat olennainen askel erikoisen piirteen esille tulemisessa, emergenssissa—ainutlaatuisuuden, joka erottaa merkittävän teoksen tavallisesta elokuvasta.

This dissertation aims to provide a film editor's perspective on the subject of structure in cinematic art. Structure is often equated to formulaic writing, about whose contribution to the art—whether it is beneficial or detrimental—there is considerable controversy. While structure certainly has formulaic aspects with which writer and editor alike must work, nothing of artistic value to either the creator or the recipient of a work can be made by simply following a formula: art's one essential attribute is integrity to *itself*.

In this dissertation, the abstract concept "cinematic structure" is first contrasted with structure in story and literary structure. Second, approaches to constructing an edit—from rough cut to fine tuning—focusing on structural matters but not neglecting the interplay between editor and director, are described and analyzed.

I find that structure is naturally inclined towards phi, the mathematical "golden ratio" or "golden cut" posited to account for aesthetic beauty in nature and in art, and fractal geometry, the ordered structure that is a consequence and expression of chaos. I conclude that editorial attention to structure *beyond* the purely formulaic will tend to stimulate the emergence of something unique to a film—the "je ne sais quoi" that distinguishes cinema from a mere movie.

Key words: structure, cinema, film editor, phi, editing, metadata, final cut pro x, chaos

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1. INTRODUCTION

Structure is inherent to all of nature. People desire structural integrity and possess an in-built capacity to evaluate it. Where it is absent or compromised, we tend to become confused and even offended. Where it is present, we find harmony.

This thesis is an enquiry into the nature and function of structure, in general and in cinematic narrative in particular, from this writer's standpoint as a professional film editor with 20 years experience. It aims, first, to define and describe structure; and, second, to exemplify why structural understanding is not only of great use during the editing of a film, but is a necessity if a film is to be experienced with total clarity by, and have an emotional impact on, its audience. Because of the elusiveness and abstract nature of structure, and the fact that cinema is practically always a group effort involving many persons, my writing will touch on, but not dwell upon, the unavoidable matter of structural misassumptions between editor and director.

Some argue that fictional structure is different from documentary structure. I hope to show that the difference lies only in the editor's approach to structuring. The method of construction is related not so much to film genre (or genus) than to whether a work is scripted versus non-scripted. Documentaries simply happen to be mostly unscripted or "more loosely" scripted when compared to fictional films. This often causes them to be mistaken as structurally unlike. The distinction needs to be made between the *construction* of structure and the structure *constructed*. One is process, the other, outcome. Process and outcome are not synonymous with cause and effect. This dissertation is concerned with structure *qua* structure, not with its limitless variations in cinema. It may be likened to climate science, where the same mathematical rules predict the weather—but never exactly.

1.1. The problem

The greatest difficulty in identifying cinematic structure is posed by its elusiveness. It tends to get buried under layers of multiple plots, characterization, style and theme—widely accepted cornerstones and essential attributes for a *good* story. Sometimes it

may emerge momentarily by design or, more likely, because the story is lacking in the aforementioned attributes, leaving nothing *but* structure (think of those films in which everything is so clearly predictable—like walking along a roller coaster track rather than riding it). Usually, structure is not directly perceptible to the senses nor is it intended to be. This is because there is no need to build structure simply for the sake of structure. Returning to the roller coaster analogy, the track is not steep and curvy for its own sake but for the sake of causing abrupt changes in G-forces, height and disorientation to the rider.

Film is a complex patchwork of many arts (writing, performing, photography, costume and production design, etc.) But it is even more complex than that: It is also a *dynamic* patchwork changing from moment to moment. Editors must be as attuned to the temporal (time based) aspects of dramatic substance as they are to spatial (compositional) matters pertaining to imagery.

The primary function of structure in cinematic application is to carry and deliver the narrative of a story to the viewer as an intelligible whole. It is to enable the "patches" to be assembled into an integrated body to which form and substance can then be added. Structure also has a secondary function in the editing process; that is, to guide the editor through conceptualization, much as a blueprint guides an engineer. One might think this is a function of the screenplay, which most certainly is structured to a point and does help to conceptualize. However, it is important to make a distinction between written and cinematic narrative. By consolidating all the elements of a film, both story and the arts, and by then deconstructing the structural elements supporting the consolidation, the editor can glean valuable information on where his or her work is needed—a reductionist method. In this way, structural knowledge becomes a tool or mechanism for story analysis and building (editing) an *effective* story vessel (the film itself). To be effective is to be like nature. Everything has its place in causality.

Anti-structuralists believe, on the contrary, that mechanistic editing makes for mediocre movies. I submit that this is true only when the mechanism is misunderstood, used out of context, or used as an only method in editing. It is the goal of this dissertation to consider the mechanism within the application of film editing and its utilization to the editor's advantage and show that in fact, a mechanistic, reductionist approach is a required *step* for attaining a holistic grasp on the art as a film editor.

In the course of working in film, television and commercial editing, I have often observed how the subject of structure is neglected. It is as if structure is considered to be something that will work itself out, or is the province of the screenwriter, not the editor. Or that it is secondary to style or form. If it is not neglected through ignorance then it is shunned as being boring or unartistic or even too mathematical. But what could be both more mathematical and yet more aesthetic than *phi*, the golden ratio (also known, interestingly in the editorial context, as “the golden cut”)? That ratio—1.61803399 is the numeric code —is present in all things, from the tiniest grain to the vast spiral of our galaxy. Why would anyone even want cinematic story telling to be exempt from such magnificent simplicity?

1.2. Core concepts

Four concepts central to this work are: story, film, structure and form. Each is worthy of an entire dissertation and indeed three of them have been written about and studied extensively. But until this present dissertation, cinematic structure appears to have been neglected relative to the other key concepts discussed in this dissertation.

2. REVIEW AND ANALYSIS

This dissertation makes no pretence to the scholarship of a doctoral thesis, yet I have tried to research and analyze the problem of structure in film and present it in as scholarly a manner as one who has not had the benefit of doctoral level research instruction can aspire. It would be beyond my scope and has not been my purpose to build and present an exhaustive review of the literature. Instead, I base my analysis, findings and conclusions on an exemplary review of what I regard as key relevant literature, as well as on my own considerable experience and observations in the making of films and on certain exemplary films themselves.

2.1 Approaches to the study of film

Academic studies of film fall broadly within the disciplines known as *Film Studies* and *Film Theory*.

The field of Film Studies explores the history and theory of film and cinema and examines their implications from artistic, cultural, economic, social and political perspectives (Dyer 2000). The primary methodology of exploration is critical analysis of the production, theoretical framework, context, and creation aspects of film (Sikov 2010).

The field of Film Theory sets out to understand the essence of cinema and to create conceptual frameworks for relating it to “reality, the other arts, individual viewers and society at large” (Wikipedia). Film Theory often includes the study of conflicts between visual aesthetics (cinematography, editing etc.) and the textual aesthetics of the screenplay itself. Many of these concepts have been borrowed from psychoanalysis, gender studies, anthropology, literary theory, semiotics and linguistics.

Like Film Studies, the principal methodological approach in Film Theory is essentially a critical analysis of narrative content in actual films.

2.2 Story, film, structure and form

2.2.1 Story

McKee (2011) defined stories as “metaphors for life” that exist in the region between fact and abstraction. A story stems from an observer’s insight into some event or aspect of life and is conveyed to an audience that will then share in the understanding of the observer’s insight. Insight evokes intellectual and emotional responses in the audience. The greater these two responses are, the more the story will be valued by the recipient. According to McKee (*ibid.*), for a story to achieve high regard it “must be worth telling and [be] well told.” Worthiness is a subjective term, and value-laden by definition. Therefore, anything that supplies insight is generally considered to be of value.

Stories have four essential attributes: Theme, plot, characterization and style. “These are attributes, not separable parts” (Rand 1971, 80).

Theme: Theme is the summation of the story’s abstract meaning. It is what the author wants to say. If no theme can be extracted, it is because the story’s events add up to nothing— the result of a lack of integration of events.

Plot: Because a story is a re-creation of dynamic reality, its theme has to be dramatized i.e., presented in terms of action. A widely accepted definition for *plot*, and one concisely written by Rand 1971, 82, is “a purposeful progression of logically connected events leading to the resolution of a climax”.

Characterization: Characters—entities that create or react to events—are needed to convey the plot. To be meaningful, these entities must be *characterized*; given essential traits that render them as unique individuals. Given that humans are incredibly complex beings, characterization is an enormous task of narrowing the selection of appropriate personality details.

Style: Style refers to the selection of visuals and/or words—the means by which a story is chosen to be communicated. “But style is not an end in itself, it is only a means to an end—the means of telling a story. The writer who develops a beautiful style, but has nothing to say, represents a kind of arrested aesthetic development; he is like a pianist who acquires a brilliant technique by playing finger-exercises, but never gives a concert” (Rand 1971, 96.)

2.2.2 Film

Film is one of many containers a story can be encapsulated within and transmitted from. It is undoubtedly the most complex method of story telling because it is a composite of every other method: prose, theatre, dance, music and photography.

Rudolph Arnheim (1938) (cited in Davies 2005, 184) set out “some general conditions that must be met if the combining of different media in a single work is to be an artistic success. First, we require an overall unity at the level of expression, to which different media must make distinct contributions. Second, the combining of media is artistically justified only if it permits the production of works expressively richer than would be possible in a single medium. Finally, in any successful artistic composite, one medium will always be dominant.” For film, the dominant medium is the moving image. For theatre, the dominant medium is the spoken word.

2.2.3 Structure

The Oxford English Dictionary defines structure as a noun and a verb. Both are pertinent to the central role of the film editor: As a noun, “the arrangement of and relations between the parts or elements of something complex”; as a verb, “construct or arrange according to a plan; give a pattern or organization to”. Substitute the word “plan” in the verbal definition with “screenplay” and note that “plan” is absent in the nominal definition, and one is reminded of an editor working with a scripted and non-scripted production. The term “film editor” would appear to be synonymous with “film structurer”. Structure in cinema is an abstract bare essence, a skeleton, an underlying,

unseen supporting mesh of beams that turn a complexity of functional elements into a unified whole.

If structure is compromised, unity will be destroyed and the entity will break apart and be no longer recognizable or even intelligible. "Structural integrity" implies that a complex entity can handle any stresses thrown at whatever it is supporting. The stronger the structure, the more it can withstand external forces. Not excluding time itself—think of those ageless classic movies.

The two main types of structure are substructure (structure that supports another structure) and superstructure (a structure built upon a substructure). Both continue *ad infinitum* in either direction—a superstructure built upon a substructure may be just a substructure in a larger superstructure etc. In this dissertation, I may use the words “substructure” and “superstructure” interchangeably with terms of congruent meaning such as lower level/higher level, macro/micro or block/composition.

2.2.4 Form

Form is the visible expression of a structure. When we look at a building, we see its form. The function of form is to express content. Through form one can deduce structure, although this is not always a simple task. To exemplify the form from its structure, see the images of the Abu Dhabi skyscraper Capital Gate (Fig. 1).

On the topic of form, Frank Lloyd Wright wrote: “Beethoven’s Fifth Symphony, that amazing revolution in tumult and splendour of sound built on four tones based upon a rhythm a child could play on the piano with one finger. Supreme imagination reared the four repeated tones, simple rhythms, into a great symphonic poem that is probably the noblest thought-built edifice in our world” (Wright 2005, 347-8.)

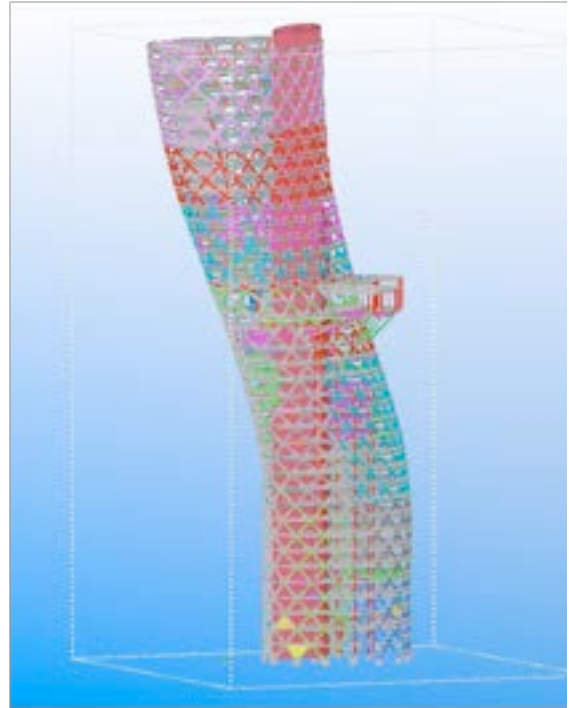


Figure 1. Capital Gate building, Abu Dhabi

2.3 Artistry in film editing

“[A]rt without craft isn’t enough. Craft without art can sneak through, but you are more likely to see your name in print if you bring both to the party.” (Brooks 2013, 20.)

The other central element required for cinematic story structure (besides integrity) is the film editor him- or herself. (See Mercer 1997 for a detailed description of the film editor’s responsibilities.)

Although the mechanics of film editing may ultimately boil down to the positioning of moving images, those mechanics may be more or less artful, depending on the artistry of the editor. The ultimate artistic achievement—beauty—is expressed through harmony. Italian 15th-century architect/poet/philosopher Leon Battista Alberti asserts: “Beauty is that reasoned harmony of all the parts within a body, so that nothing may be added, taken away, or altered, but for the worse.” (Alberti 1998, 156.)

But what constitutes reasoned harmony? Surely beauty is more than "the quality of forming a pleasing and consistent whole" as stated in the OED?

The French expression *Je ne sais quoi* ("I know not what") is often used when describing works of art to mean that a work has "a special something," an indescribable quality, to it. One thing that differentiates the master from the mediocre editor is the ability to achieve that special something.

Aristotle (2008, Ch. XXIII) said that story should have "all the organic unity of a living creature." Through film, we seek to mimic the world around us, and the world is organic, as well posited by such powerful theories as James Lovelock's Gaia hypothesis (which holds that "organisms interact with their inorganic surroundings on Earth to form a self-regulating, complex system that contributes to maintaining the conditions for life on the planet"—Wikipedia), and by Pierre Teilhard de Chardin's noösphere ("sphere of human thought"—Wikipedia.) To the extent we reflect the world's organic-ness in film, we encapsulate that magical something. Organic matter is harmonious in every sense, literally to the ratio of *phi*, whose apparent asymmetry hides a magnificent fractal geometric symmetry—the *je ne sais quoi* of *phi*.

For an editor, the *je ne sais quoi* can be an unexpected, organic-like, spontaneous, and sometimes fluidic extrusion—an emerging anomaly—that may at first seem out of place but which, upon closer examination, is revealed to be united in harmony with the whole, with the grand scheme—in short, with the film. Identifying the time and/or place to introduce such an anomaly, and determining its shape and size cannot be pre-planned but can occur only after much labour has been exerted on a project. The introduction of an anomaly must of course be relevant to the subject and proportionate with the structure (which in turn should be proportionate with the story, as will be discussed in the next chapter). There seem to be such things as fabricated oddities and true aberrations. A fabricated deviation in structure will appear forced to the viewer, and instead of enforcing story, its pretentiousness will quickly divert the viewer's attention.

An anomaly can manifest itself on many levels. It could occur as an entire scene, as the ordering of scenes, or just as dialogue. As a broad example from music: The bridge can be seen as a uniqueness, tying together verse and chorus, occurring only once in an entire piece. Of course, a bridge is to be expected and as such is no surprise, but it is a divergence.

Adding the unexpected to one's work is a subjective impulse arising out of one's "sense of life" (Rand 1971:25) and one's connection to the subject. But adding it without understanding and properly applying harmony, organic unity, relevance, and proportionality will most likely be disproportionate and cause at least some bewilderment or, in extreme cases, total confusion for the audience. Confusion leads to frustration which in turn disconnects film from story and story from audience. In short, organic harmony is vital, especially when introducing an anomaly, a surprise, an exception, etc.

Most importantly we must ask whether those prospective special "somethings"—those anomalies/exceptions—are more a matter of form than of structure. To *this* editor, an integrated structure is a prerequisite to exceptional cinematic art because it provides the skeletal support, guidance for both narrative essentials (such as concept, characters or theme) and fluidities of form. An exception in form will lend contrast should the structure be otherwise solid (refer to picture 1). In cinema, contrast can be used to calibrate the audience's emotional dynamics; how dark is evil, how light is goodness. Without it, the audience will not experience dynamic emotions since everything will seem uniform and bland. The key to editorial artistry is to understand and apply values and proportions, preferably reinforcing the editor's own originality.

3. DEFINITION OF STRUCTURE

3.1 Size and scope of structure

Structure seems to have two distinct—almost quantum physical—modes: Being and Not-being. Being is the skeleton upon which hangs the flesh of the story, while Not-being is the space necessarily created within the Being. By this I mean creating room for the viewer to vivify and internalize the story—to find its soul. Since film is essentially just the medium for story and story is the primary determinant of cinematic structure, the soul is under constant transmutation. So to edit is to affect story and how it translates cinematically.

Additionally, editing is a secondary art form built upon preceding primary art forms, such as literature, the performing arts and photography. This is particularly illuminating when recognizing the role of the screenwriter as a prime mover in his or her own field of literature—with its own structural instantiations. A story will have been influenced many times (and partly transformed) between the writing of the screenplay and the delivery of rushes to the edit suite. For these reasons, it is not possible accurately to estimate the size and scope for structure during its construction.

The degree of influence varies, but there is always some, for better or for worse. The editor's job is to build an actual cinematic structure relating to a screenplay, at best a distant cousin to the virtual structure that left the writer's desk. Even if it were exactly the same, the editor would still be faced with translating the preceding primary arts into a cinematic presentation. To accommodate dramatic alterations made during production, the editor must modify story structure. This will inevitably modify cinematic structure, which will affect story, and so on, in iterative fashion. This is the editor's *modus operandi*.

When cinematic structure is determined by any means other than story, the resulting film will be inharmonious. Proportions will be off and we will see films like the recent

installment of *The Hobbit* by Peter Jackson, about which film critic Anthony Lane wrote (*The New Yorker* 17.12.2012) this damning conclusion:

“In ‘Lord of the Rings,’ the errand of Frodo, though epic in execution, was plain enough: to destroy what would, in the wrong hands, cause irreversible harm. It was like stopping the Nazis from building the atomic bomb. But what the dwarves want, in the pages of ‘The Hobbit,’ is gold, and their lust for it corrodes the quest and tarnishes its valor.....In my old paperback, Tolkien gets the whole thing done in two hundred and eighty pages, nineteen chapters in all. And how far has Jackson travelled, after almost three hours of cinema? The end of Chapter 6.”

Lane points to the huge thematic difference between *LOTR* and *The Hobbit*. The noble, life-and-death theme of *LOTR* deserves a super-sized 3-part cinematic structure, whereas the petty, venal theme of *The Hobbit* does not. Audiences and critics of *The Hobbit*, myself included, have judged it as tiresome. Tiredness leads to loss of focus. An unfocused audience will not experience the story as it was meant to be experienced. Information will be missed, actions and reactions misinterpreted. Furthermore, when story is spread too thinly, as it is in *The Hobbit*, conflict becomes sparse. “No conflict, no drama.” (Shaw 1946, 8.)

Improper structure can therefore destroy story, whereas a suitable structure will accommodate the story line perfectly, that is, not too big, not too small. When an editor is asked to “rescue” a poor film, the first thing s/he will try, is to balance the structure to story. The story may not actually be bad, just structured disproportionately. Of course, some stories can be bad, but the editor may not pin point the culprit without first adjusting structure. Only then can you begin to determine whether and how the story could be improved. In this sense, structural understanding can assist in epistemological matters.

Finding the right structure for a flawed story is particularly demanding. One must progress with incremental shifts between adapting structure and reworking story, and there are no guarantees of success. In my past experience, more often than not, I find myself shrinking structure to accommodate a story that has been falsely identified as larger (better) than it actually is.

3.2 Selection and arrangement in structure

"Structure is a matter of arrangement and position" (director Aku Louhimies, personal communication). Then, the question becomes: the arrangement and position of what, by whom, for whom and to what end? If a film's purpose is to carry and convey a story (the "what"), then without a creator (the "by whom") there would be nothing to carry and without a receptor (the "for whom") nothing could be conveyed. This is the reasoning behind why selection and arrangement should therefore seek justification from the creator and his/her viewers.

Initially, each image must have (it cannot *not* have) an intrinsic value that fluctuates in the mind of the audience member depending on its juxtaposition with other images and its relationship to the elements (plot, theme, characterization and style) of story. This is not even to mention subjective values or sound, dialogue, atmospherics and music.

Asked if the feelings of the audience are something he takes into consideration, director Mike Leigh replied that they are the only things that matter. He continued: "There's no point in making a film if it's not going to be experienced by audiences. I make films for audiences" (Ghomeshi 2011). Asked if it would bother him if his audience experienced his film as bleak or heavy, he said it would mean that he had failed, but he fell short of adding: "because that is not what I intended". Instead, he said: "because that's not how I experience it". From this, we can see the relationship between film director and audience as consisting of intention and expectation on the director's side, and wants and needs on the side of the audience. But both parties share *experience* of the film. I venture to suggest, therefore, that Lee would have been more correct to say that audience feelings were all that mattered *to him*.

To give his audiences "an experience of a solid, varied, complex dose of humanity" Leigh creates his films seemingly without a plan. "The journey of making a film is the journey of discovery as to what the film is." He adds: "There is no correlation between [what you call] the free fall approach to my creative processes and the end product. I

submit I make very careful and considered, structured pieces of work which take into account all the criteria of classic story telling. And that's what I do by instinct".

Maybe Leigh's genius at producing *je ne sais qois* stems from his ability to create a "complex variable" of material and structure it in such a way that audiences can receive and retain it all with ease—processing themes at a deeper levels.

The audience's needs change over the course of the film. It is a *dynamic* process. The first need is affirmation that the story concerns the audience. Each member of an audience is ultimately concerned only with his/her own interests and well being. Selfish human nature wants to know: "Is this worth my attention, or could I be focusing on something that would give me greater reward?". To satisfy this demand and connect with the audience, the film maker must begin by presenting the "what" and reinforce it with the "who". In a fiction film, the essence of this innate in the script. To get from script to performance and photographic feat—to dramaturgy—the editor must identify, evaluate and elucidate the essence of action. In non-scripted projects, identification is the greater task as there is no script (or at best a very approximate one) with which to consult.

The second audience demand is the simple if not mundane "So what?" Structure must support an answer: "So *this*." It is not enough to have Somebody doing Something; that is merely an event, it is not a situation. At the most effective moment, structure presents a situation in proportion to the entire film—though the audience will not know this, and does not need to. A situation involves drama and is as such a stark contrast from a mere event.

A second Something must therefore occur to the Somebody doing the first Something, resulting in an (unresolved) situation. Screenwriters call it "the inciting incident, the catalyst". The second Something could be a hook, spin, twist, a plot point, even a value charge (a shift in context).

Whatever it is, it must happen just at the right time, in an appropriate order with the most fitting moments selected to capture and retain the audience's interest (the first and

omnipresent intent of the film maker). A third Something the audience will expect is an surprising resolution to the situation that creates meaning. Anything less, and the film will fail—it won't connect. So structure not only bears the weight of the story, it also guides the viewer along, apportioning space and time to answer the “Whats”, ‘Whos’”, “Whens” and “Whys”.

The criterion of selection is theme. Selection must be delimited because a person can only understand so much or hold so much information at any one moment.

How to decide what to include and what to omit? In constructing a sequence structure, the editor might approach this question by first ignoring it completely by adding everything intended (scripted) or available (non-scripted). This way, the editor can gain empirical insight and form an educated opinion to what is the bare minimum needed of the subject to carry purpose. Attributing factors to the "bare minimum" concept is an understanding of the knowledge and motivation of the audience and the time available for the sequence. A film for intelligentsia will differ greatly in these respects from a film for children—as would topic and subject respectively.

3.3 Plot-based vs. theme-based vs. character-based structure

The (arguable) possibility that most popular films are plot-based leads to a misconception that structure is synonymous with plot, or even with chronology. But structure might just as well comprise theme and/or character.

Leigh's 2008 film *Happy Go Lucky* has little plot and leans heavily on theme and character. Its theme is: You are responsible for your own happiness; or, A happy life is made of small bits of joy; or, To remain happy in this world requires bravery and caring for others. The plot-theme for *Happy Go Lucky* is: Staying happy in a miserable world. The film portrays the humdrum life of middle school teacher Poppy, who has no real aim in life and experiences no life-changing conflicts that might otherwise force her to undertake a journey of self discovery. There is no self-evident inciting incident, no hooks nor spins. No one specific antagonist to single out. Poppy is not in need or in

want of anything. It is precisely her optimistic outlook on life that stands out in the relentlessly ordinary and indifferent world that surrounds her.

This film is structured so as to exploit the tension that arises out of the audience's expectation that sweet loveable Poppy will not be able to sustain her happiness against ever stronger forces of injustices. From the start, Leigh establishes in his audience a strong bond of sympathy for Poppy, who is so positive that the audience is bound to wonder "Who is this woman and what's wrong with her?". It seems to me that this audience bond of curiosity and concern is part of the substructure and shares the burden of holding the story intact, beneath the superstructure formed from the expectation that Poppy's happiness cannot last. These two polarities form an invisible energy field fuelled by squarely classical conditions; high stakes and hero empathy. Happiness is universally considered an ultimate goal of life.

What Leigh did, was put happiness *qua* happiness at stake. Not happiness as an effect of a cause like regaining a job, a lover or hidden treasure; simply happiness. The heroine's characterization supports the story in the most classical sense: She is gullible and naive, and doesn't seem to stand a chance in this cruel world, rather like the hobbit Frodo up against mighty Sauron and his army in *Lord of the Rings*.

The 4-part story architecture is as basic as can be: setup - response - attack - resolution. (In cinematic terms, a 3-act structure is the equivalent to a literary 4-part structure in which the second act is divided by a midpoint where the character's actions transition from reactive to proactive). For *Happy Go Lucky*, the cinematic structure answers a series of questions: Q: Who is Poppy? A: a single woman, a school teacher, an optimist. Q: Why is she like that? A: She just is. Q: What or who can change her disposition? A: Nothing and nobody. Q: Not even when trouble comes in this form? A: No. Q: Can one live like Poppy in the real world? A: Yes. Happiness is up to you yourself.

So here is a main character who doesn't even have a character arc. But change does occur in this film. The change is in the attitude of the audience and it occurs at the end of the film in the form of payoff and surprise. The film shows that happiness is possible in the real world. Its structure, relying on character and audience rather than plot, is still Aristotelian: Setup, confrontation, resolution. The resolution is in the form of a

revelation in the mind of the audience. McKee (2011) says audience revelation is equivalent to protagonist resolution. In this film, both revelation and resolution function as a payoff for the audience.

It is worth noting that although Poppy's disposition is invulnerable, impregnable, impervious to attack, this does not equate to a lack of drama. The drama stems from the audience's expectation that she is not invulnerable and this creates tension, which is a form of conflict—of drama.

Take away Leigh's brilliant treatment of his characters as multidimensional, living, breathing, real-world archetypes, the audience would not invest its emotions in Poppy. It is further worth noting that the theme of *Happy Go Lucky* is simple and universal. It therefore does not *need* a complicated structure. The challenge of building simple structure is maintaining structural integrity.

4. BUILDING STRUCTURE

“Would you tell me, please, which way I ought to go from here?”

“That depends a good deal on where you want to get to,” said the Cat.

“I don’t much care where—” said Alice.

“Then it doesn’t matter which way you go,” said the Cat.

“—so long as I get SOMEWHERE,” Alice added as an explanation.

“Oh, you’re sure to do that,” said the Cat, “if you only walk long enough.”

—Lewis Carroll: *Alice's Adventures in Wonderland*

Thus far I have been concerned primarily to describe and define cinematic structure and its elements. In this chapter, I seek to show an approach to building structure out of those elements that will tend to stimulate the emergence of the *je ne sai quoi* that distinguishes fine film from mere movie.

4.1 Starting out

Echoing the Cat in *Alice*, Peikoff (1993, 176) wrote: “If the terminus of a journey is undefined or unknowable, there is no way to judge whether or not one is moving toward it.” The editor’s “terminus” could be one of many things: Theme, plot resolution, stylistic composition etc. Any and all of these can, and often do, change or at least vary during the editorial process. But some kind of plausible proxy terminus is an essential tool for deploying structure and then for estimating how the editing is progressing in relation to it.

Without doubt, the most valuable terminus an editor could have at the start of editing is a theme, condensed down to a short sentence. What is it we, the makers, are trying to say? From here, be it non-scripted documentary or scripted fiction, the editor can use this as a standard of reference, a baseline, for evaluating material (or footage) against the script or not if one doesn't exist.

The building blocks of film are singular takes that can be of any length, intrinsic value, and form (audible, visual or both.) They are to the editor as bricks, planks, and nails are to the builder. Blocks are joined together (juxtaposed, in cinematic language) into compounds, thus becoming a new, larger component. In the case of film, a scene. When

multiple scenes are compounded they form yet another larger component, a sequence. Sequences are joined to form an act, and acts are joined to form a story. A *component* is a considered juxtaposition of blocks and a *composition* is a considered juxtaposition of components. These are the elements of cinematic structure.

At the beginning of a project, only singular blocks are available for the editor, whose task then is to bridge the gap between (on their own, insignificant) individual images and the terminus, through the juxtaposition of components. In the case of Aku Louhimies' film *Naked Harbour* (*Vuosaari*), the terminus for *this* editor was "the implications of broken relationships" constructed out of individual images that might be, say, of a boy walking his dog, or a woman taking off her wig.

The process of editing is fundamentally as simple as: Gathering footage, assembling a rough cut, and refining the rough cut until completion or "final cut". As previously stated, the editorial artistry lies in the choice of images, their placement in a sequence and their temporal and rhythmical relativity to each other. However, "artistic expression, as an internal process, is quite distinct from the exercise of *craft* involved in working an external medium to achieve a given effect". (Davies 2005:182.)

In regard to the artistic medium (i.e. story) the editor's task is to evaluate blocks and components in terms of cognitive, normative and aesthetic abstractions: Are they essential/non-essential, good/better/best/no good, important/non-important, and so on. What Rand (1971, 36) wrote of the artist in general applies to the editor in particular: "[He] does not fake reality—he stylizes it. He selects those aspects of existence which he regards as metaphysically significant—and by isolating and stressing them, by omitting the insignificant and accidental, he presents his view of existence".

The rough cut or assembly is only an initial realization of structure, a design sketch. It is the enfolding structure which, though rough and flawed, will assist the editor to project form—that is, the manifestation of the story as a cinematic experience. The rough cut is thus a vital tool in and of itself. To the layman, or even to the director, the rough cut may seem like a construction site, cluttered and chaotic but identifiably a building, or like a Frankenstein in the process of being stitched together, devoid of life, love or

reason but identifiably human. A waterless swimming pool. This is what structure looks like before form and meaning.

By definition, a coherent structure will carry story effortlessly and efficiently (efficiency is a virtue of natural structure). To the extent its coherence is compromised by flaws, a structure will carry story that much more precariously and less efficiently. If the flaws are too many or too great, the structure will be compromised to the point of collapse. The value of the rough cut is thus as a tool for improving structural competence by revealing to the editor moments of integration and disintegration, coherence and incoherence. It helps the editor determine quickly and with minimum effort, what unifies and, just as importantly and usefully, to identify what doesn't.

The point of all this is that where structure does not meet story—where there is incoherence—then story will not transmit, *ergo* will not connect. The identification of disintegration is the first step to integration. Of course mis-integration of structure and story is another structural flaw that must be identified because it will result in a shift away from the desired terminus. Mis-integration is usually the result of misplaced values to blocks or components.

Aristotle's 10 categories of being in 3 subcategories

<p>The predicate is the subject</p> <p>Substance (Sam is a human being)</p>
<p>The predicate exists in the Subject:</p> <ul style="list-style-type: none"> - absolutely Quantity (Sam is tall) - matter Quality (Sam is intelligent) - form - relatively Relation (Sam is my friend)
<p>The predicate exists extrinsic to the subject</p> <ul style="list-style-type: none"> Action (Sam is eating) - principle of action Passion (Sam is injured) - terminus of action When (Sam is late) - time Where (Sam is here) - place Posture (Sam is standing) - order of parts Habiliment (Sam is in a costume) - adjacent item

Figure 2. Categories of Being. Source: Trivium

<http://www.triviumeducation.com/documents/>

By virtue of logic, editing must commence by studying, separating and defining material. This is true for scripted material just as it is for non-scripted. But for non-scripted (as I briefly mentioned earlier), the editor has more work at hand by first needing to identify and 'home-in' on which parts of the action contain particles of essence.

Aristotle's ten categories cover the gamut of analytical criteria as seen in Figure 2 above. These ten categories, though seemingly dull and self evident as shown here as a list, are the ingredients of being, and therefore of dramaturgy.

Today's editing systems are designed in large part to categorize effectively. In particular, Apple's Final Cut Pro X, which reaches beyond other systems' capabilities with the possibility of adding metadata to, lets call them blocks, through tagging with multiple keywords (Fig. 3). These tags are in fact code words that represent components of the story. Later on down the editorial process, these 'code' words or keywords may be used in reverse so as to parse a story thereby assisting the evaluation of it's sequence of exposition.



Figure 3. Building structure for Naked Harbour using keywords and colour-coded paper.
Benjamin Mercer

The development of the rough cut—the refinement of structure—can continue all the way through editing but it is more usual for it to be completed part way through the process, because structure is a prerequisite to the development of form. Thus, two distinctive stages of the editorial process can be deduced: Structural editing and the editing of form. Starting with structure and ending with form, these stages may alternate iteratively during editing.

So before any structural arrangement and positioning of blocks can begin, the editor surveys the raw footage to determine its quantity and quality. This is "mechanical" editing and it involves studying, separating, defining and coding similar to, or not unlike Aristotle's ten categories of being (Figure 2 above.) It can be done whilst *organizing* footage and after or during *gathering* (the term “prepping editorial” covers both of these processes). Surveying quantity and quality has one overall function: To organize. Organization is what I call a “non-partisan” principle of editing, i.e a universal principle with no bias for genre, theme, size etc. Regardless of the nature of the project, organization is an invaluable tool for discovery and the condensation of information.



Figure 4. Organization of footage using keywords in Apple's Final Cut Pro X 10.1. Benjamin Mercer1

The organizing of material not only tells the editor what s/he has to build with. It also reveals patterns—telltale signs of strength or weaknesses—in the material. To succeed, any artist, in any field, must know with what s/he is dealing. Surveying *quantity* from a fiction film footage pool tells the editor not just the overall amount of instances but also how many instances x s/he has in relation to instances y . In surveying *quality*, the editor will organize the smallest blocks—the beats, takes, shots and angles. Beats are inherent in takes and shots. Takes are generally the same instance of a particular shot, but each will have subtle differences in camera and actor performance. The editor cannot hold all these differences in mind, so organization serves that function. Editing tools center on the grouping of material for this very reason.

Organization and consequent understanding of what there is to work with tells the editor what material has, or lacks, value as a building block. Some shots will contain dialogue or action that has significant inherent strength (usually meaning) whilst others will have peripheral or supplemental value. By way of example: A builder whose task is to build a cathedral may find his raw material consists of glass, timber, stone and steel. The size (terminus) of the projected building tells him how much and what type of building material to use. If he does not have enough of the right material, he can redesign the building to suit the available material—make it smaller, build it with a less durable timber-clad frame instead of solid stone, etc. This clearly might affect the terminus, but at least there will still *be* one.

4.2 From blocks to components

A scene is the smallest structural element that may require the juxtaposition of several smaller blocks. Only within scenes can the editor evaluate singular shots in relation to their context; in other words: What is being said, how, and with what ends, with respect to the characters and audience in the context of the previous and following scenes, etc.

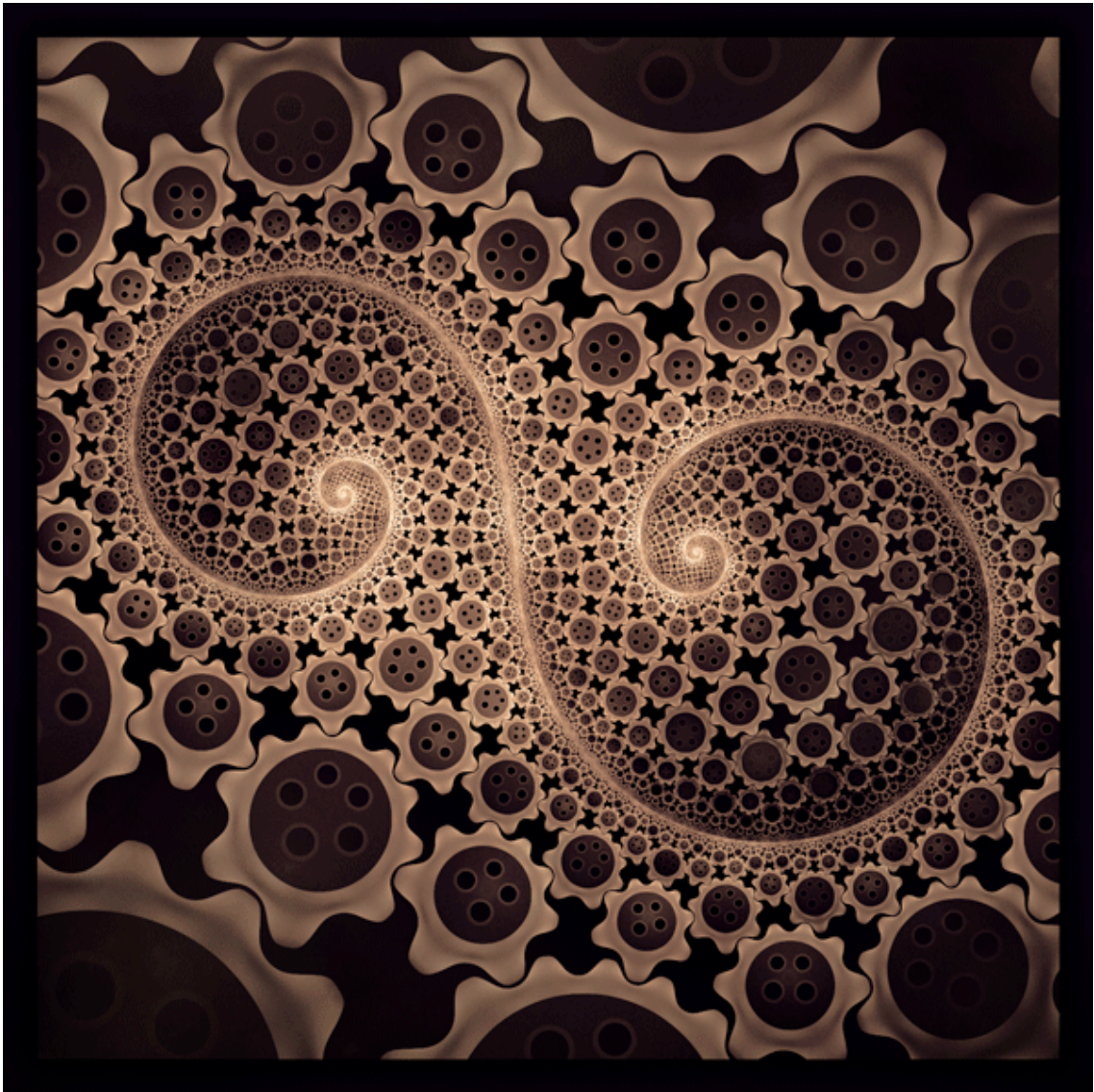


Figure 5. Components and composition of fractal geometry.

In relation to the terminus, the editor must first identify structural elements of story in order to begin to locate them (or not) from the filmed footage. It is important to keep in mind that during the act of first assembling a cut, the editor is not yet in a position to make precise evaluations of a scene as it relates to the story as a whole. Only after all scenes are constructed and placed into a predetermined order to form the assembly edit (either the screenplay's order or one determined by the editor) can the editor judge whether some are redundant, unclear or unnecessarily repetitive *in relation to the projected expression of the film, and no longer the script*. The rough cut is a first iteration of a coherent *cinematic* structure. It will impact on further editing decisions on every level—from single selections to compositional. It is still itself subject to

modification. From here on, begins what I like to call creative editing which is holistic by nature.

4.3 Refining

If, as I asserted in chapter 2, structural elements of story are held together by its four defining attributes (theme, plot, character and style), what, then, holds together the smaller structural components of cinema—the scenes, sequences and acts that keep the audience emotionally and intellectually stimulated? None of the four attributes of story can fit entirely within a single component because each relies on its precedent and antecedent components (with the exception of a one act short film, but then the audience experience will be limited).

Therefore, the question must follow: Are components subservient to the composition, or vice versa? The answer is: Neither and both—as in fractal geometry. Components are small enough for the audience to grasp the action immediately at a perceptual level; for example, the audience will know that *he* said *this*, and that *she* did *that*. Whereas the composition is the abstract sum, these smaller components share a contextual relationship with the composition but in different proportion and manifest as definite actions (Figure 5 above). It is within components (including blocks), even though they are only small parts of the composition, where dramatic elements such as focus, tension, timing, rhythm, contrast, mood, space, language, sound, symbol, conflict and climax actually reside in concrete form.

The *viscosity* of drama defines the strength of a component and therefore all of its connected overlaying structural components. Ebbing and flowing between lower level components and higher level composition is the practical implementation of the integration of drama to terminus. Substructure components must have strength to carry superstructure components, and the superstructure (including the composition) must have strength relative to the parts of which it is composed. The ideal relativity may indeed be that of the Divine Proportion, the Golden Cut, *phi*, where, as Greek mathematician Euclid said, “The whole is to the larger in exactly the same proportion as the larger is to the smaller”. That being so, the proper relationship between smaller parts

and the larger whole depends critically on proportion. Correct proportion allows us to see the small in the large and the large in the small.

As a simple illustration to why proportion is critical, consider a wooden garden shed fitted with a steel vault door typically used in banks. There would be no relation between the structural capacity of the door and that of the walls. The weight of the door would weaken the entire structure. By analogy, in cinematic story telling it would cause a story to stall, regress and ultimately to disintegrate.

4.4 Dramatic tension

American writer Gore Vidal was once asked if it were possible to write a dramatic scene in which two people discuss truth, beauty and the nature of art. He replied: “Yes, when the two people are sitting in a railway carriage and one of them knows there’s a bomb under the seat” (Parini 2012.) In that scene, the editor would have many ways to adjust dramatic viscosity. Choice of blocks and timing being the most obvious. By positioning at what moment during the conversation a ticking bomb is revealed to the viewer and/or to the character, dramatic tension can be lowered or elevated. To reduce tension, he could choose to reveal vaguely that a bomb is somewhere on the train, rather than revealing it to be directly under the characters’ seats. The editor could reveal the bomb early in the scene and then cut the scene in half to continue it later on. He could suggest the possibility, rather than reveal the certainty, of a bomb under the seat (in which case, he would set up a bomb/character exposition in an earlier scene.)

In addition to lowering or elevating dramatic tension, the editor must be aware of compromising drama. That is to say, the unwanted weakening of story by sequencing structural boundaries too early or too late. For instance, leaving a scene for another too early could compromise the degree of empathy and character depth. Likewise prolonging the point of juxtaposition beyond reasonable grounds will lead the viewer to seek meaning that isn’t to be found.

“How does one strike a balance between withholding and vouchsafing information? That is the essential task of the dramatist. And the ability to do that is what separates you from the lesser species in their blue suits. Figure it out.”

— David Mamet in a letter to his staff writers.

The editor can create drama or may discover drama that is already present. In practice, the editor does both. Literary text has inherent drama, most of which will translate to film through the skills of the performers, cinematographer and director. But it will have a *fixed viscosity*. When editing components and comparing their effects on the composition (and *vice versa*), the editor no longer deals in fixed terms. S/he needs to adjust the viscosity of drama in the separate components. In some cases, s/he may need to create or discover drama by adding or subtracting instances, just as a painter adds lines and colour to his/her canvas and the sculptor removes stone to uncover the shape. Subtractive editing is used more in documentaries but is not unknown in fictional films where the director has chosen improvisation as an approach.

4.5 Finishing

Once cinematic structure matches story—that is to say, when the story is presented with such clarity and conciseness that the viewer has no choice but to connect, to understand, and to want to learn more—then the editor can begin to mould *form* by enhancing or de-emphasizing/reducing stylistic attributes, which will have become evident during the months of work. He could, for instance, substitute dialogue for action, or make chronological changes. A connectable story is one thing, but to give it cinematic medium originality is another and is a matter of form, as the Abu Dhabi skyscraper Capital Gate (see Figure 1, above) illustrates.

If cinematic structural integrity determines how efficiently a story is absorbed by the audience, then form determines how the audience will react, emotionally and intellectually.

“[The formalist] Clive Bell... sometimes suggests that the building blocks of form [in painting] are line and colour combined in a certain way.... But the fact

is that the form of a painting includes, but is hardly confined to, the two dimensional array of lines and colour patches that mark its surface.” (Stecker 2005:140-1.)



Figure 6. The Sibelius monument in Helsinki. In front of which a dilapidated sign reads “no form, no structure, no design”. Benjamin Mercer

This thesis does not discuss the aesthetics of cinematic form, except to note that form follows structure; follows design; follows function; follows meaning; and that this holds true for the film editor.

4.6 A word on working with the director

Structural misassumptions between editor and director work both ways. The director may have a clear understanding of what s/he intends as far as theme, plot, etc., on a macro level, but can lack (for valid reasons) a micro-level understanding of the smallest building blocks—moments—through lack of comparative study; work that the editor has spent weeks or months doing. The editor will (or should) therefore identify unintentional and unwanted discrepancies and act accordingly; isolating, illuminating and elucidating the intentional essence, then further making choice selections from these iteratively.

Changes to major story attributes will and do occur before editorial intervention, sometimes even because of the smallest details *inherent within* the material resulting from *choices made* in pre-production or production. Some of these changes may not be apparent or even seem meaningful to the director. Or perhaps they were made intentionally to accommodate production limitations or improve upon the intended plan. Perhaps they are made unintentionally due to restrictions of skill and time. Whatever the case may be, unnoticed changes made pre-editorially will further widen the gap between what the director *expects* from the editor and what s/he *gets*.

Because of the editor's close relationship with (intricate understanding of) the material, s/he will build a structure appropriate *to* the material in line with the original theme. It is important to stress that an appropriate structure may not accommodate half of what *was* intended thematically. This does not mean the structure is faulty. In fact, the structure may be superb *in relation to* the material it was created from. However, the director (or writer for that matter) would not see the beauty in such a structure; they would see only shortcomings in either their own work or the editor's comprehension of the footage and story as a whole.

The difference is critical: in the former circumstance the editor has seemingly done an excellent job and the director not so; in the latter, precisely the opposite. Which way the scale tips depends on the expertise of both director and editor. Who's to be right or wrong is not the concern of this text and would require a meticulous case study. The point: is that assuming to know every detail available and building a mental image

based upon that assumption is not the same as actually knowing the details and building a concrete image (timeline).

In editing, the "butterfly effect" (of chaos theory, according to which the flap of a butterfly wing Honolulu can cause a storm over Helsinki) is an unexceptional certainty. The film editor is in a position of prominence in knowing the chain of events from micro to macro levels. S/he is, in a way, a composer of deterministic chaos—a term used in science by chaos theorists regarding how little things make a big difference, such as the term "butterfly effect" depicts. But here lies the other edge of the proverbial sword; the currents of minutiae can (and do) frequently carry the editor off course, to the extent that s/he loses the bigger picture and needs periodical *direction* from the director. Directors' and editors' skills vary, but so do assumptions. And these assumptions are determined by the reviewer's precision and thoroughness when examining the material.

5. CONCLUSION

In the end, the art of it is to tell the audience so much and no more, at this moment and at no other, in the following order and not in a different order.

—Tom Stoppard's answer to Charlie Rose's question: "What does the dramatist do between a good story and a fine piece of art that lives?"

What Sir Tom is actually describing as "the art of it" is, and cannot be anything but, structure. Because what is cinematic structure if not a sequenced dosage of information, the rhythm and rhyme of visual and audible concepts, from which an exception emerges that lifts the form to uniqueness?

In the literature on structuralist theory for film, most emphasis is placed on the structure of the screenplay alone. Examples are O'Bannon and Lohr (2013) and Snyder (2005). Peter Suderman, a senior editor at *Reason* and a movie critic for the *Washington Times*, notes that Snyder's best selling screenplay guidebook drastically expands upon the basic three-act structure "that has dominated blockbuster filmmaking since the late 1970s" by breaking the three acts down further into 15 key story beats. It even specifies the page number of script at which the beat should occur. It is, in practice, "a minute-to-minute movie formula," wrote Suderman (2013).

Snyder (now dead) would not have agreed. He himself had written "that his beat sheet is a structure, not a formula." But in practice, Suderman avows, "it's become a formula that threatens the world of original screenwriting as we know it," It can and has produced fine movies, but it has also resulted in too many similar movies and too little creative experimentation.

Cinema is much more than a screenplay. It is in fact more than the sum of its verbal and non-verbal elements.

I conclude from this analysis firstly that cinematic structure must be distinguished from literary structure. They share structural concepts and elements but cinematic structure adds a unique grammar consisting of all the elements in film: lighting, scoring, sound

and set design, colour, composition and editing to mention but a few. Secondly, using structure as a tool in the reductionist sense is not formulaic storytelling. It does not limit expression; rather, it empowers expression by—metaphorically speaking—providing the contextually sound walls, floors and rooms to optimally display paintings and guide viewers through the entire collection. The gallery is to paintings and sculptures what structure is to cinema. Each painting could be a scene, each hall an act, each corridor a plot point.

Thinking structurally is akin to thinking conceptually; the condensing of information into components. The ability to see structure in story and apply that blueprint as a tool to segment exposition when creating a cinematic experience serves the editor in regard to efficiency and clarity. In some instances even lending motivation.

A structural thinking approach is necessary precisely because of the enormous complexity of cinema. It will actually help in achieving the pragmatic reductionist approaches necessary for the emergence of *je ne sais quoi*, helping the editor to trace, understand and consequently to partially control the "butterfly effect." I use the word partially because as in life, film has so many variables that it would be presumptuous to imply total control.

5.1 Emergence of phenomena

Cinematic structure is not Euclidean but fractal in geometric essence. Professor Eero Paloheimo (2004, 32) says it simply and beautifully in his book *Struktuuri*:

Tuleva liukuu menneeksi sattuman ja säännön hallittuna yhdistelmänä.

What lies ahead slips behind, governed under the alliance of chance and rule.
(translation Benjamin Mercer)

There is no doubt that film is already inherently complex, yet its prevalent mode is still only two-dimensional. Given: (1) That growing knowledge and understanding of fractal, non-linear, complex, chaotic, unstable systems suggests that something wholly new is bound to emerge from a system, such as a cinematic system, that grows ever

more complex (Ellis 2011); and (2) That the success of movies such as *Avatar* and *Gravity* strongly suggest that the third dimension will become the dominant mode as the technology improves and issues such as viewing angles and motion sickness are overcome, then we may hypothesize that out of film's growing complexity a whole new state of the art could emerge. Surely such an event is worthy of further study.

5.2 Suggestions for further research

Further work to understand structure in 3D film is needed for several reasons. A pragmatic one is to avoid too long a transition from 2D. More interestingly, artistic and psychosocial acceleration within the next two decades is likely to take us from an art form in which mass audiences passively watch cinema into one in which individual audiences of one, or small groups, interact inside life-sized, fully immersive and intelligent holographic creations not far from the fiction holodeck of the TV series *Star Trek*.



Figure 7. The Great Wave at Kanagawa, by Katsushika Hokusai. Fractal geometry in art.1

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